

ABSTRACT

Methods, system and apparatus, including computer program products, for rendering a user interface in a client program. The techniques include detecting multiple changes to a user interface of a computer program, the user interface having multiple user interface elements, each change being a change to one of the multiple user interface elements; generating a rendering request for each change, each rendering request specifying the user interface element that has changed and a type of modification to be performed on the user interface element; and filtering the requests to eliminate redundant requests. The user interface can be rendered based on the filtered requests.

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